JEW 266 PTO/SB/21 (04-04)

Total Number of Pages in This Submission				Attorr	ney Docket Num	ber	I-2-0	173.3	US	
ENCLOSURES (Check all that apply)										
	Fee Trans	smittal Form		Drawing	ı(s)				After Allowance communication to Technology Center (TC)	
	Amendment Afficient Affici	fter Final ffidavits/declaration(s) of Time Request Abandonment Request ental on Disclosure Statement Copy of Priority		Petition Petition Provisio Power o Change Fermina Request CD, Nur	to Convert to a nal Application of Attorney, Revoor Corresponded Disclaimer to the Refund mber of CD(s)	ocation		Form	Appeal Communication to Board of Appeals and Interferences Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please Identify below): PTO-1449	
	SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT									
Firm or		Michael L. Berman	Reg. No. 51,464							
Individual name		Volpe and Koenig, P								
Signature		Memen	<u>~/ </u>				***			
Date		Fébruary 7, 2006	- ···· <u> </u>			_	-			
CERTIFICATE OF TRANSMISSION/MAILING										

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date

February 7, 2006

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria,

VA 22313-1450 on the date shown below.

Michael L. Berman

Typed or printed name

Signature

Our File: I-2-0173.3US

Date:

February 7, 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the PATENT APPLICATION of:

De et al.

Application No.: 10/080,124

onfirmation No.:

2919

Filed:

February 21, 2002

For: SI

SINGLE USER DETECTION BASE

STATION

Group:

2661

Examiner:

Robert W. Wilson

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT INCLUDING RULE 1.704(d) STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Further to Applicants' Duty of Disclosure pursuant to 37 C.F.R. §1.56, Applicants wish to bring to the Examiner's attention the material cited on the enclosed PTO-1449 form. Newly cited documents are indicated by an asterisk (*).

Pursuant to 37 C.F.R. §1.98(a)(2)(ii), copies of the newly cited U.S. publications and/or patent documents have not been included.

In the spirit of Rule 1.704(d), the undersigned certifies that each newly cited item of information contained in this Supplemental Information Disclosure Statement was cited in a communication in a counterpart U.S. application, and that this communication was not received by any individual designated in §1.56(c) more than

Applicant: De et al. Application No.: 10/080,124

thirty (30) days prior to the filing of the supplemental information disclosure statement.

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the PTO-1449 form indicating his/her consideration of the cited materials.

Respectfully submitted,

De et al.

By_ Mberman

Michael L. Berman Registration No. 51,464

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MLB/ks Enclosure

FORM PTO-1449 ATTY, DOCKET NO. SERIAL NO. I-2-0173.3US 10/080,124 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE **APPLICANT** De et al. 3 2006 INFORMATION DISCLOSURE **FILING DATE GROUP** STATEMENT BY APPLICANT February 21, 2002 2661 (Use several sheets if necessary) **U.S. PATENT DOCUMENTS** FILING DATE IF APPROPRIATE EXAMINER INITIAL DOCUMENT NUMBER DATE CLASS SUBCLASS * 5,157,688 10/1992 **Dell-Imagine** 5,337,226 12/1994 Davis 5,377,225 12/1994 **Davis** 5,477,225 12/1995 Young et al. 5,648,983 07/1997 Kostic et al. Vollmer et al. 6,064,689 05/2000 * 2002/0126619 09/2002 De et al. 2002/0126646 09/2002 De et al. 2002/0131383 09/2002 De et al. 2002/0136160 09/2002 De et al. 2002/0141366 De et al. 10/2002 2002/0141372 10/2002 De et al. 2002/0141373 10/2002 De et al. 2002/0154599 10/2002 De et al. 2002/0154619 10/2002 De et al. 2002/0159383 10/2002 De et al. 2002/0159428 10/2002 De et al. OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Ramjee Prasad, Werner Mohr and Walter Konhauser editors, Third Generation Mobile Communication Systems, Artech House, Boston, 2000. Anja Klein, Ghassan Kawas Kaleh and Paul Walter Baier, "Zero Forcing and Minimum Mean-Square Error Equalization for Multiuser Detection in Code-Division Multiple-Access Channels", IEEE Trans. on Vehicular Technology, Vol.45, No. 2, pp. 276-287, May 1996. Naja Klein, "Data Detection Algorithms Specially Designed for the Downlink of CDMA Mobile Radio Systems", IEEE 47th Vehicular Technology Conference, pp. 203-207, May 1997.

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EXAMINER	DATE CONSIDERED

FORM PTO-1449 ATTY. DOCKET NO. SERIAL NO. I-2-0173.3US 10/080.124 U.S. DEPARTMENT OF COMMERCE **APPLICANT** PATENT AND TRADEMARK OFFICE De et al. INFORMATION DISCLOSURE FILING DATE **GROUP** STATEMENT BY APPLICANT February 21, 2002 2661 (Use several sheets if necessary) OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) H.R. Karimi and N.W. Anderson, "A Novel and Efficient Solution to Block-Based Joint-Detection using Approximate Cholesky Factorization", Personal, Indoor and Mobile Communications PIMRC' 98, Conference Proceedings, Vol. 3, pp. 1340-1345, Sept. 1998, Boston, MA. ETSI STC SMG2 Layer 1 Expert Group, "Low Cost MMSE-BLE-SD Algorithm for UTRA TDD Mode Downline" Tdoc SMG2 UMTS L1, Helsinki, Finland, Sept. 1998. 3G TS 25.102 V3.4.0, 2000-10, "UTRA (TDD) Radio Transmission and Reception", 3rd Generation Partnership Project, Technical Specification Group RAN WG4, Annex B., pp. 37. Lang Tong; Guanghan xu; Kailath T: "Blind identification and equalization based on second -order statistics: a time domain approach", IEEE Trans. Inf. Theory (USA), IEEE Transactions on Information Theory, March 1994, USA, ISSN 0018-9448, VOL-40, NR 2, pages 340-349 Benvenuto N. et al. "Joint Detection With Low Computational Complexity For Hybrid TD-CDMA Systems" VTC 1999-Fall. IEEE VTS 50th. Vehicular Technology Conference. Gateway to the 21st Century Communications Village. Amsterdam, Sept. 19-22, 1999, IEEE Vehicular Technology Conference, NY Vandaele P. et al. "Recursive Total Least Squares Algorithm for Single-User Blind Channel Equalisation: IEE Proceedings: Vision, Image and Signal Processing, Institution of Electrical Engineers, FB, Vol 147, No. 3, 23 June 2000 Yang et al., "Fast Joint Detection with Cyclic Reduction Exploiting Displacement Structures", 2000 IEEE International Conference on Acoustics, Speech and Signal Processing, Istambul, Turkey, June 2000 Proakis et al., "Digital Signal Processing", Macmillan Publishing Company, New York, NY, 1992, p. 835, para. 11.3.1, p. 890, para. 12.3.2 Vollmer et al., "Joint-Detection Using Fast Fourier Transforms in TD-CDMA Based Mobile Radio Systems", International Annual Conference of ICT, 1999, pp. 1-7, p. 1, para. 1, p. 2, para. II, p. 3, para. III, p. 4, para. IV. Pigeonnat, "Alternative Solutions for Joint Detection in TD/CDMA Multiple Access Scheme for UMTS", IEEE Signal Processing Workshop on Signal Processing Advances in Wireless Communications, May 1999, pp. 329-332, p. 329, para. 2.

EXAMINER	DATE CONSIDERED